

REMARKS

Claim 3 has been amended to exclude dipropylene glycol monomethyl ether from the recitation of glycol ethers and to exclude amyl acetate from the recitation of carboxylic acid esters. In this regard, Applicants direct the Examiner's attention to MPEP 2173(i), which states that if alternative elements are positively recited in the specification, they may be explicitly excluded in the claims (see *In re Johnson*, 558 F.2d 1008, 1019, 294 USPQ 187, 196 (CCPA 1977)); since dipropylene glycol monomethyl ether is positively recited at page 16, line 28 as one alternative which can be used for the other solvents other than aprotic solvents, it can be explicitly excluded in the claims, and since amyl acetate is positively recited at page 17, line 2 as one alternative which can be used for the other solvents other than aprotic solvents, it can be explicitly excluded in the claims.

Entry of the above amendment is respectfully requested.

Provisional Obviousness-Type Double Patenting Rejection

On page 3 of the Office Action, in paragraph 5, claims 3, 6, 12, 16, 18 and 19 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 2, 10, and 19 of copending Application No. 11/794,547 (US Pg-Pub 2008/0167210).

In response, and to advance the prosecution, Applicants submit herewith a terminal disclaimer to obviate this provisional rejection. Accordingly, Applicants submit that this provisional rejection has been overcome, and withdrawal of this provisional rejection is respectfully requested.

Anticipation Rejection over Kikuhara et al.

On page 4 of the Office Action, in paragraph 7, claims 3, 12 and 14 are rejected under 35 U.S.C. 102(b) as being anticipated by Kikuhara et al. (JP 04-182062).

In response, Applicants note initially that Kikuhara et al. relates to a solder flux removing liquid, which is different in use from the composition of the present invention. However, it discloses, in Table 1 as comparative example 3, a composition consisting of 15 % by weight of aromatic hydrocarbons and 85 % by weight of propylene glycol monomethyl ether.

Applicants note, though, that the term "propylene glycol monomethyl ether" in Table 1 of Kikuhara et al. should read --dipropylene glycol monomethyl ether--, which is clear from the description on page 4, upper right column, lines 12-13 of Kikuhara et al. In this regard, Applicant submits herewith a partial English translation of Kikuhara et al.

In view of the above, Applicants have amended "glycol ethers" in claim 3 to --glycol ethers excluding dipropylene glycol monomethyl ether-- in order to differentiate the present invention from Kikuhara et al.

Thus, Applicants submit that the present invention is not anticipated by Kikuhara et al., and withdrawal of this rejection is respectfully requested.

Anticipation Rejection over Serdiuk et al.

On page 5 of the Office Action, in paragraph 8, claims 3, 12 and 14 are rejected under 35 U.S.C. 102(b) as being anticipated by Serdiuk et al. (US Patent 5,276,096).

In response, Applicants note initially that Serdiuk et al. relates to a two package coating composition comprising an acrylic resin and a polycarbodiimide, which is different in use from

the composition of the present invention. However, it discloses, in Example 3A, that an 80:20 solvent blend of primary amyl acetate/solvesso 100 was used as solvent for an acrylic resin.

In view of the above, Applicants have amended "carboxylic acid esters excluding ethyl acetate" in claim 3 to --carboxylic acid esters excluding ethyl acetate and amyl acetate-- in order to differentiate the present invention from Serdiuk et al.

Thus, Applicants submit that the present invention is not anticipated by Serdiuk et al., and withdrawal of this rejection is respectfully requested.

Obviousness Rejections

On page 7 of the Office Action, in paragraph 10, claims 3, 12, 14 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Koyanagi et al. (WO 03/072634, wherein the citations are from the English equivalent document US Pg-Pub 2005/0153530) in view of Wyatt et al. (US Pg-Pub 2003/0118946). Also, on page 9 of the Office Action, in paragraph 11, claims 3, 16 and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kamayachi et al. (US Patent 4,943,516) in view of Wyatt et al. (US Pg-Pub 2003/0118946). In addition, on page 11 of the Office Action, in paragraph 12, claims 6 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kamayachi et al. (US Patent 4,943,516) in view of Wyatt et al. (US Pg-Pub 2003/0118946) as applied to claim 3 and in further view of Dhillon (US Patent 4,822,723).

In response, Applicants note initially that the Examiner stated in the Office Action that the Declaration under 37 CFR 1.132 filed on February 12, 2010, is insufficient to overcome the rejection of claim 3 because the Declaration does not compare the remover solution of the instant application with a solution of the closest prior art of record; that the applicant uses Solfine® C-

550 while Wyatt et al. uses Exxon Isopar[®] L; and that the applicant does not explain if the Solfine[®] C-550 is equivalent to Exxon Isopar[®] L.

Accordingly, Applicants have obtained the isoparaffinic hydrocarbon EXXON Isopar[®] L, prepared the composition of Example 4 of Wyatt et al. using EXXON Isopar[®] L, and evaluated cleanability of the composition as shown in the attached Rule 132 Declaration.

The results show that a remarkable amount of pigment remained when the composition of Example 4 of Wyatt et al. was used, and that cleanability of the composition of Example 4 of Wyatt et al. is remarkably inferior in cleanability to the composition of the present invention.

The results also show that the composition of the present invention is unexpectedly superior in cleanability for a photosensitive composition containing a pigment, and that a mere combination of two or more of solvents listed in prior art references will not always create a composition having superior cleanability equivalent to the present invention. Applicants submit that it would not have been obvious for one of ordinary skill in the art to establish a combination of solvents which is superior in cleanability for a photosensitive composition containing a pigment, even though each solvent was disclosed in prior art references.


Therefore, Applicants submit that the present invention would have been obvious from the prior art references, and withdrawal of these rejections is respectfully requested.

Conclusion

In view of the above, reconsideration and allowance of this application are now believed to be in order, and such actions are hereby solicited. If any points remain in issue which the Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned at the telephone number listed below.

The USPTO is directed and authorized to charge all required fees, except for the Issue Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any overpayments to said Deposit Account.

Respectfully submitted,



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PARTIAL ENGLISH TRANSLATION OF KIKUHARA ET AL.

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1. TITLE OF INVENTION

Solder flux removing liquid

2. CLAIMS

(1) A solder flux removing liquid comprising
25 to 95 percent by weight of an aromatic hydrocarbon
having a flash point of not less than 40°C, which contains
not less than 20 percent by weight of at least one selected
from the group consisting of trimethylbenzenes,
methylethylbenzenes, and propylbenzenes having nine carbon
atoms; and

5 to 75 percent by weight of a propylene glycol
derivative.

3. DETAILED EXPLANATION OF INVENTION

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(Page 4, upper right column, line 8 to lower left column,
line 15)

[Examples]

Removing liquids were prepared by mixing a commercially available cracked gasoline as aromatic hydrocarbon and dipropylene glycol monomethyl ether as propylene glycol derivative at various ratios.

Pine resin or a mixture of pine resin and 10% by weight of aniline hydrochloride was used as flux sample. 0.75 g of each flux sample was dried under reduced pressure at 150°C, and then was cooled, and was put in 10 mL of each of the above removing liquids. After letting stand at room temperature for 24 hours, condition of the flux sample was observed. The results are shown in Table 1.

Table 1

	removing liquid		flux sample		
	cracked gasoline (wt%)	propylene glycol monomethyl ether (wt%)	pine resin	pine resin & aniline hydrochloride	
Example	1 90	10	○	○	
	2 75	25	○	○	
	3 50	50	○	○	
	4 25	75	○	○	
Comparative example	1 100	0	○	×	
	2 97	3	○	△	
	3 15	85	△	○	
	4 0	100	×	○	

where

○ means that the flux sample dissolved completely and the liquid became transparent.

△ means that there was a small amount of precipitate.

× means that there was precipitate.